Lecture 9

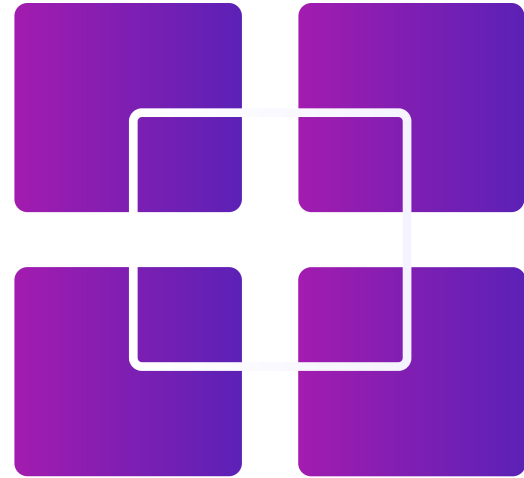**- Content analysis**
- Leadership

Agenda

- Method: Content analysis
  - Linguistic analysis
  - Workshop (by Linhui Wu)
- Topic: Leadership
  - Top management teams (TMT)
  - Upper Echelon theory
- Discussion
  - Content analysis in Leadership: Hur et al. (in progress)
  - Content analysis in Leadership: Gamache et al. (2015)
  - Discussion questions
- Next class

Method: Linguistic analysis

- Algorithm vs. Human
- Data for linguistic analysis

Linguistic analysis: Human vs. algorithm

- Q. How much human decision is involved?
- There is no single best way (depends on research question, rigor)

Linguistic analysis: Human vs. algorithm

1. Building own dictionaries, making decisions on what to include/ exclude
2. Using the existing dictionaries
3. Using machine learning-based methods (e.g., natural language processing)

Linguistic analysis: Human vs. algorithm

○ Problem with human judgments?

○ Problem with machine learning? (e.g., context specific; various use)

○ "I would love to work with you so bad"

○ "The annual finance/ budget is…."

Data for linguistic analysis: reviews

- Product reviews (e.g., Amazon, from positivity to emotionality)

- Service reviews (e.g., Yelp)

- Employer reviews (e.g., Glassdoor, positivity)

Topic: Leadership

- Top management teams (TMT)
- Upper Echelon theory (Hambrick)

Leadership

- C-suite (e.g., CEO)
- Top management teams
- Their influences on firms (e.g., hiring, death (!), Upper Echelon)
- Factors that influence them (e.g., executive compensation)

Leadership

- How important TMT is?
- How much effects they have on firm performance?
- One view = how they are as individuals is not important (strategic decision-making based on market, without individual influence)
- The other view = how they are as individuals is important

Leadership (Upper Echelon Theory)

- Not only the structure/ system they belong

- Who they are as individuals matters!

Leadership (Upper Echelon Theory)

- Political ideology (political donation, corporate social responsibility)

- Cognitive/ personality traits (e.g., regulatory focus)

- Personal background (e.g., socio-economic background)

- Even their family composition (e.g., having daughters/ wife working)

Content analysis in Leadership: Hur et al. (in progress)

Money Cannot be Green: The Impact of Performance Incentives on Financial Concerns and Sustainability

BY Julia D. Hur

Organizational vs. Individual Effort

Research Question

Q. What prevents organizations from making environmentally sustainable decisions?

"Rewards given for meeting or exceeding certain standards in the target task" (Deci, Koestner, & Ryan, 1999)

Research Question

Performance incentives & sustainability decisions

- Performance incentives are common among top executives
  - In 2016, 61% companies in US provided at least half of CEO equity compensation based on performance
- Top executive attributes shape strategic decisions of organizations
  - Chin, Hambrick, & Treviño, 2013; Dahl, Dezső, & Ross, 2012; Petrenko et al., 2016
- Attentional bias top executives maintain influences organizational decision-making
  - Finkelstein et al., 2009; Gamache & McNamara, 2019; Hambrick, 2007

Central Prediction

Performance incentives of top executives will decrease environmentally sustainable behavior of the organization.

Theoretical Development

## Performance incentives increase attention to rewards

- Flexibility increases attention to the object
  - Escera et al., 1998; Faw, Nunnally, & Ator, 1969; Friedman & Singh, 1989; Giorgi et al., 2015
- Consume cognitive resources to the extent they impede performance
  - Beilock & Carr, 2005; DeCaro et al., 2011; Markman, Maddox, & Worthy, 2006
- Predict financial consequences of decisions
  - Hur & Nordgren, 2016

Theoretical Development

Attention to rewards decrease sustainable decisions

- Fixed-pie bias in prosocial behavior
  - Amanatullah et al., 2008; Thompson & Hastie, 1990; Norton & Sommers, 2011
- Assume the trade-off between environmental protection and financial profits
  - Essoussi & Linton, 2010; Luchs et al., 2010; Whillans & Dunn, 2015
- In reality, no link between environmental and economic performances of organizations
  - Ambec & Lanoie, 2008; Luo & Bhattacharya, 2006; Schaltegger & Synnestvedt, 2002; Sen & Bhattacharya, 2001; Shrivastava, 1995; Orlitzky, Schmidt, & Rynes, 2003

Theoretical Development
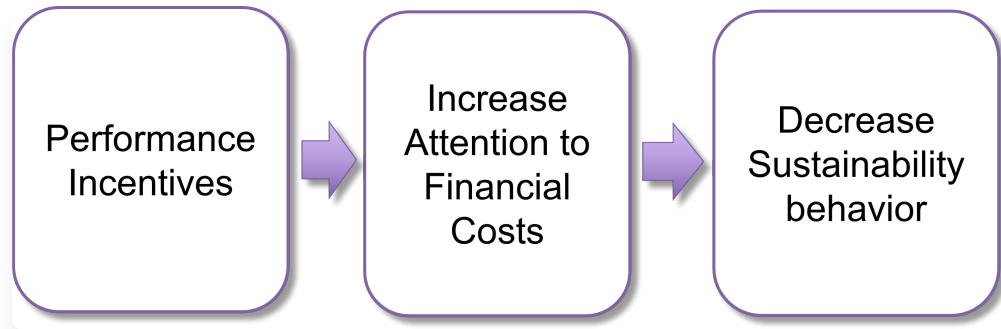
Overview of Studies
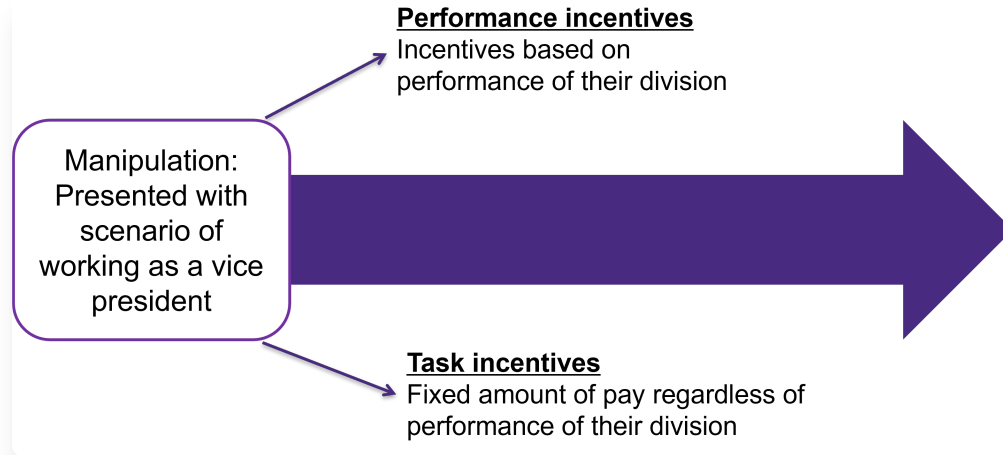
Study 1: Lab Experiment

Study 2: Archival Data

Study 1

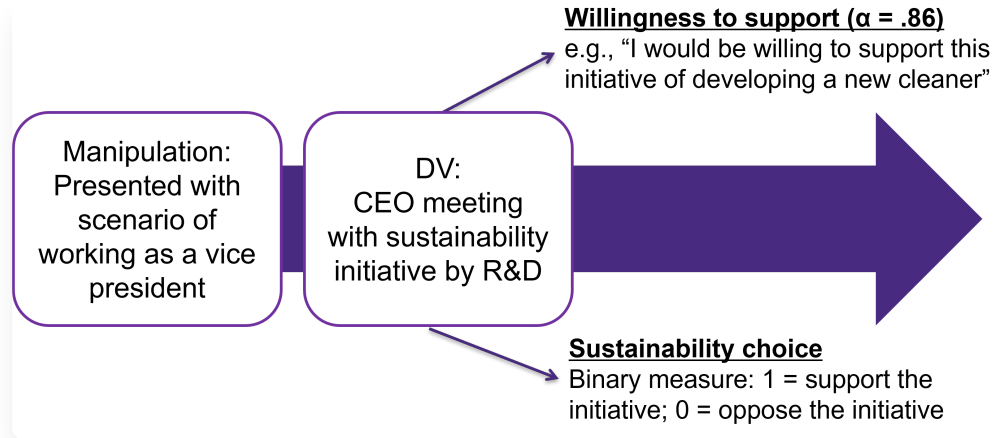Goal: Test a causal relationship & mechanism

Study 1

- 401 full time employees (Mage = 35, 46% female)

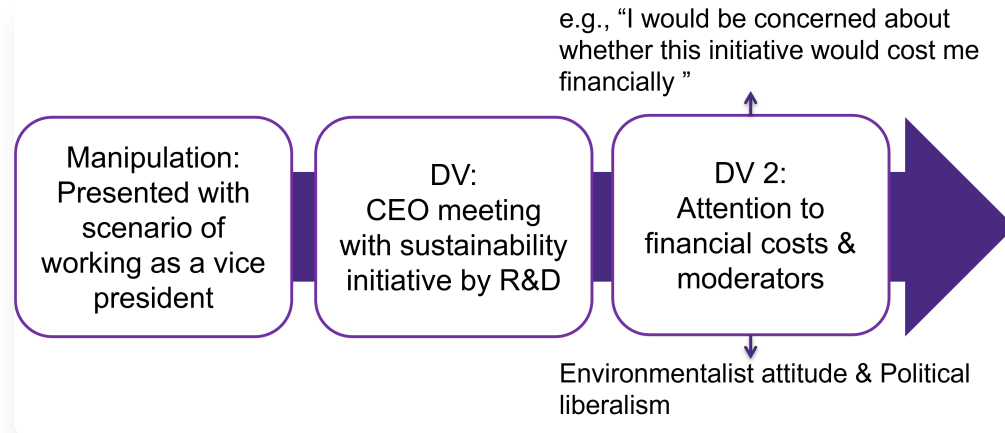- Between subject design

Performance incentives
Incentives based on performance of their division

Manipulation: Presented with scenario of working as a vice president

Task incentives
Fixed amount of pay regardless of performance of their division

Study 1

- 401 full time employees (Mage = 35, 46% female)

- Between subject design

Willingness to support (α = .86)
e.g., "I would be willing to support this initiative of developing a new cleaner"

Manipulation:
Presented with scenario of working as a vice president

DV:
CEO meeting with sustainability initiative by R&D

Sustainability choice
Binary measure: 1 = support the initiative; 0 = oppose the initiative

Study 1

- 401 full time employees (Mage = 35, 46% female)

- Between subject design

e.g., "I would be concerned about whether this initiative would cost me financially "

| Manipulation: Presented with scenario of working as a vice president | DV: CEO meeting with sustainability initiative by R&D | DV 2: Attention to financial costs & moderators |

Environmentalist attitude & Political liberalism
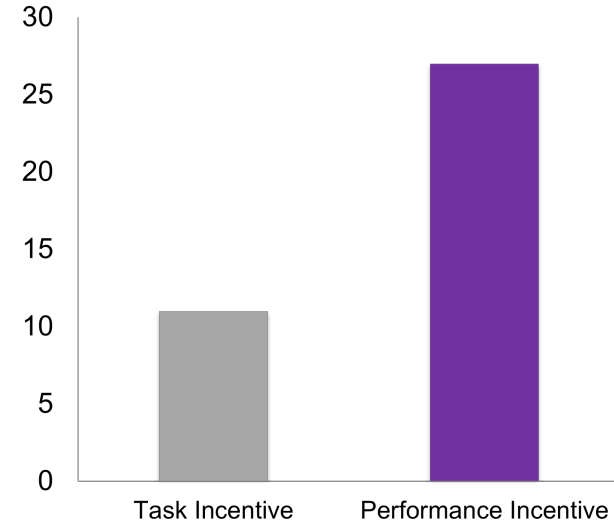
Hoffarth & Hodson, 2016; Schlegelmilch, et al., 1996

Study 1: Results

Willingness to Support
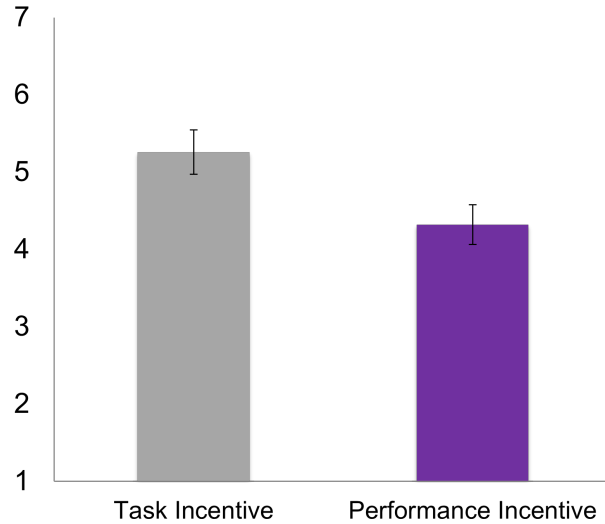
t(399) = -7.35, η < .001, 95% CI [-0.94, -0.53], d = -0.73

Opposing Choice (%)

χ^2 (1, n = 401) = 17.66, p < .001, w = .21

Study 1: Results
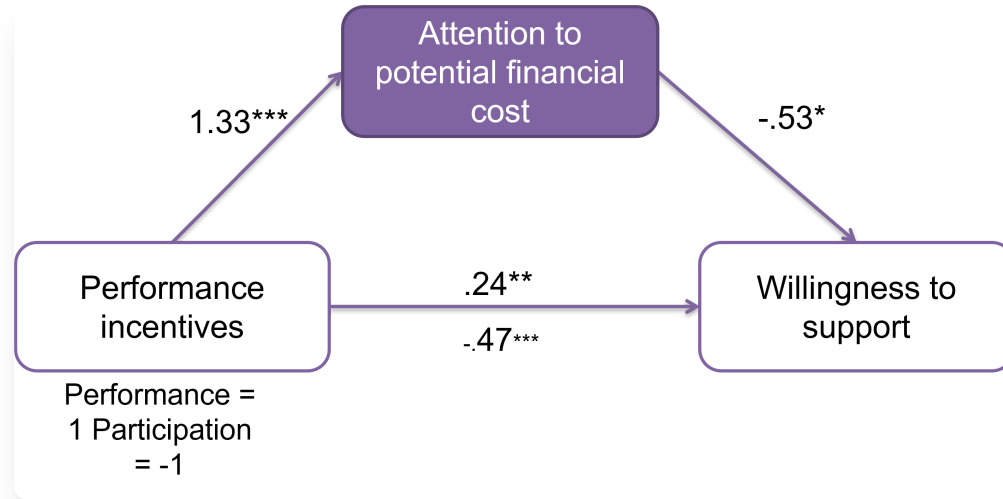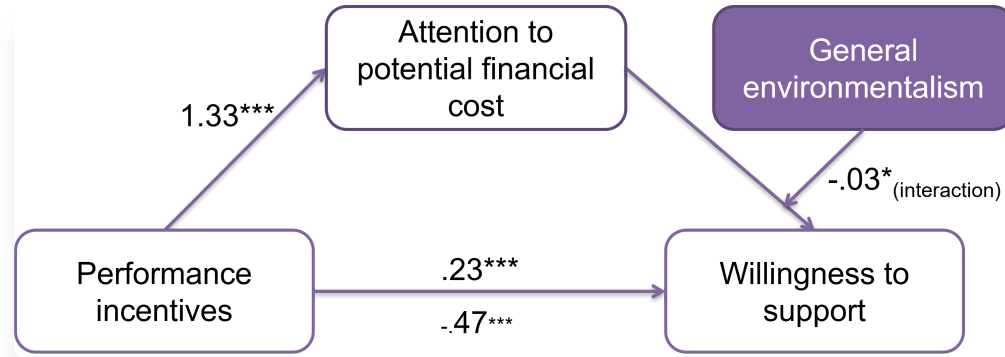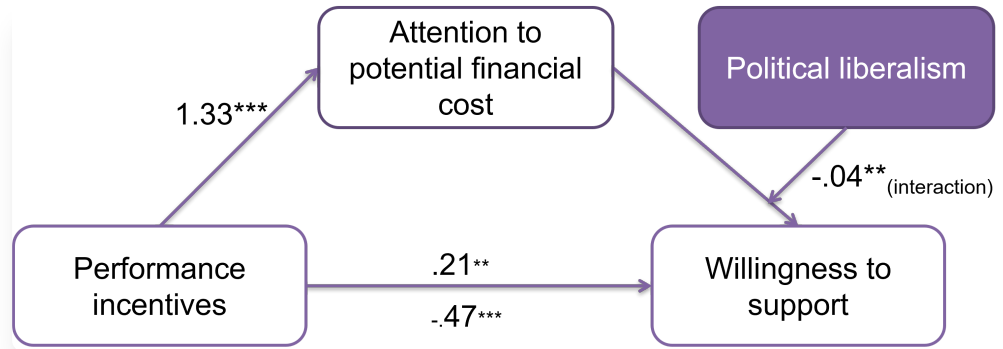

95% CI = -.8448 to -.5831; *p < .05, **p < .01, ***p < .001

Study 1: Results

Moderated mediation, 95% CI = -.0880 to -.0023; *p < .05, **p < .01, ***p < .001

Study 1: Results

Moderated mediation, 95% CI = -.1005 to -.0074; *p < .05, **p < .01, ***p < .001

Study 2

Goal: Test a relationship between CEO performance-contingent incentives and firm sustainability actions

Study 2

- Data
  - Compensation: Compustat Execucomp Data
  - Sustainability: ESG database Sample: Unbalanced panel data on S&P1500 firms from 1996 to 2006
- Measures
  - IV: Performance contingency of executive compensation
  - DV: Sustainability decision
  - Mechanism: Attention to money

Study 2

Measures (other covariates)

- Return on equity
- Return on asset
- Market value (log)
- Earnings per share
- Book-leverage ratio
- Director CEO
- Employment size (log)
- Revenue (log)
- Cash ratio

Estimation strategy

- First Difference Estimator (Baltagi, 2008)

Study 2

	(1)	(2)	(3)
Pay Performance Contingency	-.06***	-.07***	-.06***
	(.02)	(.02)	(.02)
Total Asset	.004	-.01	-.01
	(.08)	(.09)	(.09)
Capital Expenditure	-.04	-.05	-.05
	(.04)	(.04)	(.04)
Cash	.04	.03	.03
	(.02)	(.02)	(.02)
Revenue	.21***	.20**	.20**
	(.07)	(.08)	(.08)
Market Value	.02	.02	.01
	(.04)	(.04)	(.04)
Employment Size	.05	.07	.07
	(.05)	(.06)	(.06)
Earnings Per Share	.01	.01	.02
	(.01)	(.01)	(.01)
Return on Asset		-.001	-.0003
		(.02)	(.02)
Return on Equity		-.001	-.002
		(.01)	(.01)
Leverage		-.0003	-.0001
		(.01)	(.005)
Attention to Money			-.04**
			(.02)
Observations	11,679	11,068	11,068
Firm & Year Fixed Effect	Yes	Yes	Yes

Summary

Q. What prevents organizations from making environmentally sustainable decisions?

Theoretical Implications

- Organization environmental behavior: "resources"
  - Organization-level resource and performances
  - Top executives' attention and compensation
- Performance incentives: earnings management
  - No obvious link between behavior and incentives (e.g., cooking books)
  - Assumption of whether it is financially beneficial or not
- Top executive decision-making: personal attributes
  - Political ideology, demographic backgrounds, and personality traits
  - Find a cause in the system (e.g., incentive system)

Content analysis in Leadership: Gamache et al. (2015)

Next Class